

Redescription of *Catonetria caeca* Millidge & Ashmole from Ascension Island (Araneae: Linyphiidae)

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Summary

An adult male and adult female of *Catonetria caeca* were collected in the type locality on Ascension Island in May 1995. The holotype, collected in 1990, has proved to be a subadult female, so the species is redescribed here from the new material of both sexes. The genus is close to *Agynera* Hull.

Introduction

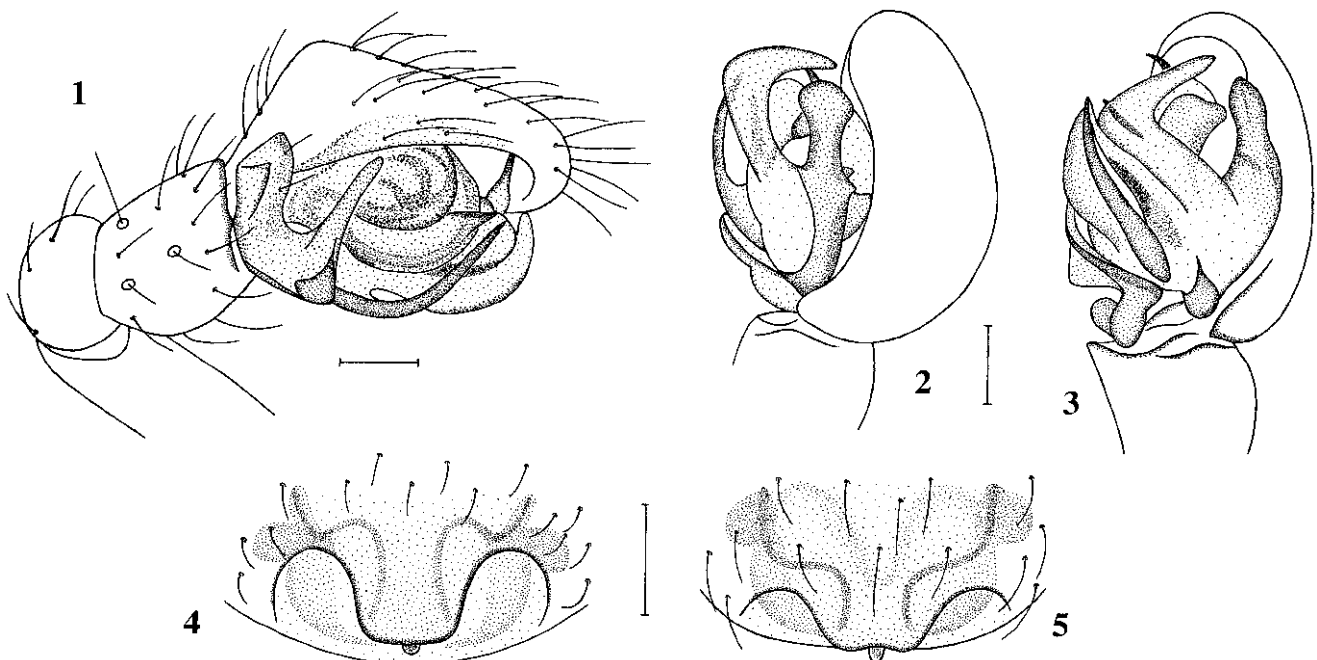
Catonetria caeca was described from Packer's Hole, Ascension Island, by Millidge & Ashmole (1994) from a single specimen which was believed to be an adult female. In May 1995 N. P. Ashmole searched intensively for further material in the type locality, and was successful in collecting one adult male, one adult female and a juvenile female. Comparison of the newly collected female with the holotype has shown that they are identical in all characters except the genitalia, and that the holotype is unfortunately subadult. No other related

species was collected in the type locality. The species is therefore redescribed and rediagnosed here from the new adult female and male. All measurements are in mm.

Genus *Catonetria* Millidge & Ashmole, 1994

Diagnosis: Both sexes are diagnosed by the absence of eyes, by the very pale colour, and by the long slender legs. The male palp is similar to that of *Agynera* Hull, but is distinguished by its long narrow lamella. The epigyne is also similar to those of *Agynera* and *Meioneta* Hull, but it is smaller than any known species of *Agynera*. It is distinguished from *Meioneta* by the presence of a trichobothrium on metatarsus IV, and by the position of TmI.

Description: Both sexes have total length 1.2–1.3. The species is cave-dwelling, blind and pale yellowish-white in colour. The carapace is unmodified; the chelicerae have 3 or 4 teeth in the anterior row, and no stridulatory ridges are discernible. The legs are long and slender, with tibia I l/d c. 18. All tibiae have two dorsal and no lateral spines, and the femora and metatarsi are spineless. A slightly bent trichobothrium is present on metatarsi I–IV, with TmI 0.85–0.9. The female palp is clawless. The epigynum (Figs. 4–5) is of the same general form seen in many species of *Meioneta* and *Agynera*. The male palp (Figs. 1–3) has the cymbium elevated dorsally, as in *Agynera*. The tibia has 3 trichobothria, and a minute pointed apophysis on the ectal margin. The lamella is long and narrow, and basally separated by some distance from the end of the radix. The terminal apophysis is complex, and the embolus a simple, pale curved structure with a short, narrow pointed process carrying the duct. The paracymbium is well developed, with a prominent antero-ventral flange or pocket, a low ridge on the postero-ventral margin, and a triangular projection proximally.



Figs. 1–5: *Catonetria caeca*. 1 Male palp, ectal view; 2 Ditto, mesal view; 3 Ditto, ventral view; 4 Epigynum, postero-ventral view; 5 Ditto, antero-ventral view. Scale lines=0.05 mm.

Taxonomic position: The form of the epigynum and male palp indicates a close relationship with *Agynera* and *Meioneta*. *Catonetria* resembles *Agynera* more closely in the presence of a trichobothrium on metatarsus IV, the position of TmI, the bent trichobothria, and in the absence of dorsal apophyses on the palpal tibia or cymbium. However, it is closer to *Meioneta* in the presence of 3 trichobothria on the palpal tibia, the number of cheliceral teeth, and the form of the long narrow lamella, which is rather like that of *M. levis* Locket from Angola. Species of *Meioneta* are widespread in Africa and South America, but *Agynera* is apparently restricted to the Holarctic region apart from a single record of *A. conigera* (O.P.-C.) from Zaire, which was possibly imported (Locket, 1968).

No epigeal species of *Agynera* or *Meioneta* have been recorded on Ascension. In view of its uncertain origin, and its extreme adaptations to troglobitic life (complete absence of eyes, pale colour and long legs), it seems justified to retain *Catonetria* as a separate genus.

***Catonetria caeca* Millidge & Ashmole, 1994 (Figs. 1–5)**

Adult female: Total length 1.2. Carapace length 0.5. Entire body and appendages pale yellowish-white, slightly darker in head region and on chelicerae. Carapace with a few long hairs in midline. Eyes absent. Chelicerae with 4 moderate sized teeth in anterior row, no stridulatory ridges. Sternum and abdomen sparsely covered with short hairs. All legs with a double row of strong hairs ventrally. Length of femora I and IV 0.9. TmI 0.9, slightly bent. Epigynum (Figs. 4–5): The epigynal region protrudes considerably from the abdomen, as shown in Millidge & Ashmole's (1994: fig. 1) drawing of the subadult female. As only one adult female specimen is available, and there can be no uncertainty about identification of the species, the internal structure of the epigynum has not been examined.

Male: Total length 1.3. Carapace length 0.5. As female except: chelicerae with 3 anterior teeth, smaller than in female; femur I length 0.95. Both metatarsi I lost. Palp (Figs. 1–3): The structure of the embolic division is very complicated, and it is not possible to determine all the details without dissecting it; this has not been done, as there is only one male specimen available.

Material examined: Ascension Island, Packer's Hole Cave: subadult female holotype, 26 March 1990; 1 ♀ 1 ♂, 1 juvenile ♀, 28 May 1995. All leg. N. P. Ashmole, deposited in National Museums of Scotland, Edinburgh.

Discussion

Reassessment of the taxonomic position of *Catonetria* places it in a group that is well known for aerial dispersal. Recent analysis of the whole fauna of Ascension Island (Ashmole & Ashmole, in press) has shown that in spite of the extreme isolation of the island and its geological youth (*c.* 1.5 million years), the fauna includes a number of endemic and other species whose ancestors seem likely to have reached the island by air.

It has recently been shown that westward-moving disturbances analogous to the better-known easterly waves of the North Atlantic occasionally affect the area of Ascension Island (Hall, 1989). These disturbances probably originate in central equatorial Africa and can lead to upper-air easterly winds of around 25–35 knots persisting for 3–4 days. Ballooning spiders in such airstreams could reach Ascension from the coast of West Africa in about two days, if they remained airborne.

Acknowledgements

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